

---

THE VOICE OF CONTROL LINE  
AEROMODELLERS FROM  
AROUND AUSTRALIA

---

Number 31



Produced by the Victorian Control Line Advisory Committee

March 2000

**INSIDE THIS ISSUE**

- Contest Calendars
- Combat tips and tricks
- Nationals Bulletin No 3
- For Sale
- Wanted
- Around the Clubs
- News from W.A.
- Letters to The Editor
- Contest Results and pictures
- My thoughts on Team Racing from Andy Kerr
- Editorial
- Class 2 Team Race
- Millennium Championships

**Copy Deadline for next issue is:  
Wednesday 22nd March 2000  
PRODUCTION SPECIFICATIONS**

Please remember when submitting copy that if you have access to a PC, or suitable typewriter you can save us retyping by giving us your items pretyped, and please use a good black ribbon for best reproduction.

**Best of all is to send it on a 3.5" disk as a Windows Write, Word for Windows, or as an ASCII TEXT FILE or use Email**

Conest results should be tab delimited, ie use a single tab between each column of results, if submitted by disk. This makes formatting much easier on the editor.

Harry and Paul Bailey at  
37 Thompson Street. Clayton VIC. 3168.

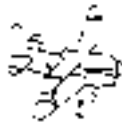
Telephone (03) 9543 2259.

Email address:- [acln@ozemail.com.au](mailto:acln@ozemail.com.au)

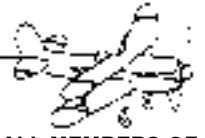
Fax is also available, but please notify before sending to ensure fax is active.



# COMING EVENTS



# COMING EVENTS



THE FOLLOWING PROGRAMME IS OPEN TO ALL MEMBERS OF THE MODEL AERONAUTICAL ASSOCIATION OF AUSTRALIA (M.A.A.A.)

## LOCATION OF FLYING FIELDS

(ALL EVENTS START 9 am UNLESS OTHERWISE NOTED)

## VICTORIAN CONTROL LINE CALENDAR

DATE	EVENT	CLUB
YEAR 2000		
MAR 5	HAND LAUNCHED GLIDER	SMAC
MAR 12	FAI T/R, GOODYEAR, JUNIOR 2.5 COMBAT	CLAMF
MAR 26	F2B, (HEARN'S TROPHY) NOVICE & JUNIOR AEROBATICS, COMBINED SPEED, CLASS 2 T/R	KMAC
APR 2	SIMPLE RAT RACE, SIMPLE GOODYEAR,	SMAC
APR 9	FAI & COMBINED SPEED, MINI GOODYEAR, STATE CHAMPS & NATS PRACTICE	CLAMF
APRIL 21-24 VICTORIAN STATE CHAMPIONSHIPS SMAC/CLAMF/KMAC/CLAMF		
APRIL 26 - MAY 4 53rd AUSTRALIAN NATIONAL CHAMPIONSHIPS NOWRA NSW		
MAY 21	FAI & COMBINED SPEED, TRIATHLON (ARTMIL TROPHY)	CLAMF
MAY 28	F2B (YOEMAN TROPHY) NOVICE & JUNIOR AEROBATICS, VINTAGE STUNT	KMAC
JUNE 4	BALLOON BURST, LIMBO	SMAC
JUNE 18	FAI T/R, GOODYEAR, MINI GOODYEAR, 1/2A T/R	CLAMF
JUNE 25	F2B, NOVICE & JUNIOR AEROBATICS, COMBINED SPEED, CLASS 2 T/R	KMAC
JULY 2	SIMPLE COMBAT	SMAC

Events will be flown in order of printing. Events in **Bold type** will be flown over hard surface

**CLAMF** Frankston Flying Field, Wells Rd, Seaford (Melway 97J10), 10.30am start

Contact :- G. Wilson (03) 9786 8153,

Events conducted by CLAM.F at the KMAC Field (Melway 72 K9) 10.00am start.

Contact :- H. Bailey (03) 9543 2259

**KMAC** Stud Rd . Knoxfield (opposite Caribbean Gardens)

(Melway 72 K9) 10.00am start **Note:-** All events listed at KMAC

**Except Stunt** to be run by the competitors on the day

Contact :- T. Matthews (03) 9560 0668.

**SMAC** Memorial Drive, Ross Reserve, Noble Park. (Melway 80 E12) 10.00am start.

Contact :- Reeve Marsh (03)9776 5949

**WMAA** Horsham. Contact :- V. Cresp (03) 5382 4065

**BRCAC** Bendigo-Newbridge Rd . Marong

Contact :- S. Power 03 54 424 925

Competitors at CLAMF competitions are reminded that events **start at 10.30a.m.** and they should be ready to begin at this time.

CLAMF members are reminded that club meetings are held on the first Friday of the month at Clayton Primary School, Browns Road Clayton

**TAMWORTH MAC:** CONTACT LEN SURTEES 02 67-61 8508  
**R.E.M.A.C.:** PETER BOARD HIGH SCHOOL, WICKS RD.,  
**S.S.M.E.:** LUDDENHAM ROAD, LUDDENHAM.  
**K.M.F.C.:** ST. IVES SHOWGROUND, MONA VALE ROAD, ST. IVES.  
**S.A.T.:** KELSO PARK, HENRY LAWSON DRIVE  
**I.M.A.C.:** BIRKLEY ADJACENT TO FREEWAY.  
**MUSWELLBROOK M.F.C.:** MITCHELL HILL FIELD, NEW ENGLAND HWY., MUSWELLBROOK.  
**DOONSIDE M.F.C.:** EASTERN CREEK RACEWAY OFF REEN ROAD, BLACKTOWN  
**NARROMINE:** CONTACT STEVE BAKAC 02 68 89 2501  
**CLAS** CONTACT MIKE COMISKY 02 9605 2062

DATE	HOST	EVENTS & VENUE
MAR 4/5		HUNTER VALLEY CHAMPIONSHIP
MAR 12	WERRINGTON	F2B AEROBATICS
MAR 19	KMFC	VINTAGE STUNT, VINTAGE 1/2A T/R F2B AEROBATICS
APR 2	SAT	VINTAGE STUNT
APR 15	REMAC	NATIONAL CHAMPIONSHIPS
APR 26-MAY 4		PALMER / ALDRICH CLASSIC STUNT
MAY 6	KMFC	VINTAGE DIESEL COMBAT
MAY 13	REMAC	CLASSIC STUNT TO 1970 WITH MUFFLERS
MAY 21	WERRINGTON	F2B AEROBATICS, CLASSIC (F2B) STUNT, VINTAGE STUNT
JUN 3/4	KMFC	ALL AMERICAN VINTAGE STUNT AND REMAC/MECA ENGINE COLLECTION. (1pm START)
JUN 18	REMAC	F2B AEROBATICS
JUN 25	SSME	A.G.M. SESQUI STUNT, 2.5cc RAT RACE, 2.5cc STUNT
JUL 9	KMFC	TEAM RACING, VINTAGE A and B , OPEN B, BENDIX, PHANTOM.
JUL 29/30	SSME	F2B AEROBATICS
AUG 13	KMFC	CLASSIC STUNT (F2B PATTERN)
SEPT 10	KMFC	F2B AEROBATICS
SEPT 17	ILLAWARRA MFC	F2B AEROBATICS
SEPT 30-OCT 2		NSW STATE CHAMPIONSHIPS
OCT 15	REMAC	DUKE FOX MEMORIAL STUNT
NOV 19	SAT	F2B AEROBATICS
NOV 19	KMFC	VINTAGE A T/R, 1/2A T/R, VINTAGE STUNT
NOV 26	SSME	F2B AEROBATICS
DEC 2	REMAC	VINTAGE STUNT
DEC 3	WERRINGTON	CLASSIC STUNT TO 1970 WITH MUFFLERS
DEC 3	MACARTHUR MODEL AVIATION CLUB SPORT inc	SCALE DAY
DEC 10	KMFC	CHRISTMAS PARTY AND FUN FLY

All dates subject to change : for further details contact:-

Guy Bevan Hon Secretary CLAS 2 Kamilaroi Rd Bayview 2104 Phone / fax 02 9979 9595 Mobile 0412 465 802

Email: guybevan@hotmail.com

## Queensland Control Line Events

### Calender

#### Coming Events

Date	Events	Venue
Mar 12th	Ipswich Open Scale Champs, CLASII Rat	
Apr 9th	CLASII Rat, Slow Combat, Open Combat.	
May 14th	CLASII Rat, Vintage A, Vintage B.	



### Tarmac Notes for January and February

'The times, they are a changing', a chap named Robert Zimmerman once said, and he was right. At least as far as the West Australian weather is concerned. For some reason, we have started the year off with more than our fair share of those weekend gales that keep us fair weather modelers far from the flying field. Would you believe that when I was a boy, the wind never blew this hard on weekends and the sun always shone? (Except at night of course when it has it's batteries charged.)

My spies tell me that the reason that engine guru and current Vintage A State Champion, Darryl Mills has been conspicuously absent from the flying field in recent times is that he has been flying full sized aeroplanes again. There is a lot of that going on lately, the skies of Western Australia are filled with restless aeromodellers fluttering about among the clouds. Darryl has however, been keeping his finger on the pulse of team racing and will no doubt be back in action in time to defend his State Vintage A title in May this year. On the subject of Vintage A racing, I see that Adrian Dyson has worked out how to get the necessary range from his CS Oliver powered 'Pluto' and is busy practicing for the next race day. One more thing learned at this outing was the need to sand the sharp edges off new props before use. Those APC props are razor sharp on the ends and quite capable of drawing blood from innocent pitmen, (and some that are not quite so innocent as well).

Meanwhile in Queensland...Perfect one day; forbidden the next. I was more than a bit surprised to hear that after winning the Qld State Championships for Vintage A, Mark McDermott had been disqualified on the grounds that his engine had been modified.

Dennis Percival sportingly sent over a video showing snippets of aeromodelling history for us to check out. It was made up of short pieces of film taken at various competitions and Nationals in the Eastern regions in the early 1960s. I found it most interesting, if a little hard to follow in places as it randomly flashed from Free Flight to Control Line and then Radio Control. The bits of team racing swept me back to the past with the hectic, close starts (that is all models were together at the start, not at different segments around the circle as they are these days). The 44 gallon drum as a center marker with pilots

galloping around it and bumping into each other from time to time. Pit stops were wherever the engine quit, and pitmen, followed by battery boys struggling with heavy lead acid batteries were running in all directions. Just as I remembered. I thought that I recognized a few of the faces that flashed briefly on the screen, though a combination of sometimes blurry focus and my need for a seeing eye dog did raise some doubts. I am sure that I saw a fleeting glimpse of West Australian ace Noel Mitchell, several shots of the ubiquitous Ivor Stowe (now Ivor F) zooming about partially clad in the 1960s sunshine, and even Tom Prosser doing clever things with an early and very large radio transmitter. We need more of this capturing of history before it is lost forever.

Speed and composite materials specialist, Grant Lucas brought a prop mould to the flying field for us to look at. It was milled from solid aluminium by Stuart Sherlock using his computer controlled milling machine. Grant has hand finished the vital surfaces to a mirror finish and to say that it is a thing of beauty is an understatement. Naturally, this was the weekend that I forgot to take a camera down, so there will be a delay before you see any pictures. I have seen the first prop out of this mould as well and it looks very impressive and feels very strong. Definitely not one to stick your dainty little fingers into. Grant is using 'prepreg' unidirectional carbon fibre for his props and this makes a very strong and stiff propeller. For those that are not familiar with the term, 'prepreg' is a reinforcement material (in this case carbon fibre) that comes already prepared with the fibres wetted out with resin in the optimum resin to reinforcement ratio to give maximum strength. This prepreg material has to be kept refrigerated until it is used, and then it is oven cured at a precisely controlled elevated temperature. Grant has been learning and developing these advanced composite manufacturing methods as part of his day to day existence making racing bicycle frames and forks.

Here is something that I have mentioned before, but worthwhile stuff bears repeating from time to time. There is a useful substance called Green soft soap that you can buy from the better (or older) chemist's shops. It is a very mild soap that can be used by people with sensitive skin, or skin disorders that normal soaps irritate. Its name is a good description of the stuff, as it is a translucent green coloured paste. In addition to its washing duties, this soap has a couple of other applications that are handy for aeromodellers. One is its use as a constituent of the traditional lubricant for the motors of rubber powered models. There are many recipes for this. Here is the one that I use on the now rare occasions that I dabble with rubber powered models. Make a mixture of: Soft soap - 4 parts, Glycerine - 2 parts, Water - 6 parts, stir these together while heating on the stove until it is thoroughly mixed. The longer you make the heating phase, the thicker the brew will be when it cools down. It will be thin and runny as long as it is warm, so it is a bit hard to judge, but aim for a mix with the consistency of honey when cold. If you want to be a bit more modern, or don't want to brew your own lubricants, some people use silicone grease (available from Radio Spares) or even Armourall spray (from auto accessory outlets).

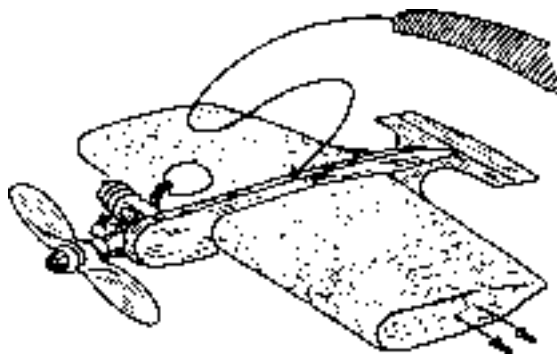
Another use for soft soap is during the heat treatment of tool steel in the home workshop, and for this it is very

good. To harden something that you have made from tool steel (silver steel or part of an annealed file) you have to heat it until it is red hot and then plunge it into a pot of water or oil to quench it. When the job is brought to red heat, a scale of hard oxide often forms on the surface. This has to be cleaned off and may spoil the job. However, if the whole job is smeared with a layer of soft soap before heating, air is excluded from the surface and no scale will form. The residue of burnt soap just falls away when the job is quenched. Jolly good stuff this green soap - even if you don't wash often.

That is it for this month. Have you ever noticed that persons of the gender that most aeromodellers are not, (which, for want of a better term, I will refer to as women) generally do not seem to be very fond of spiders? Especially the large hairy type of spider. Based on my personal observations, that seems to be the case at my place anyway. They come in from the garden and ask questions like: 'There's nothing crawling on the back of me, is there?' I have found that the correct answer to this question is not: 'No, of course there's nothing crawling on your back. It's going up your spine in long, easy strides towards the back of your neck.'

Charlie Stone

VH 4706



**Combat Tips and Tricks:** Taken from the Association of Combat Enthusiasts (Ace) Newsletter.

Please send in any Tips you use. My first is for the less experienced which means you! Don't trim your model with the balance point too far to the rear even if you can handle it one-up. It's best to start with a model that can be flown eyes-off and will fly exactly where you want it to go in a bout. Leave all the super tight one-up practice flying to the poseurs and the experts.

I'm hopeful of obtaining a "Trick" from each of the country's top combat competitors for this section in future. Mine follows from the above "Tip". When flying level before combat commences (or recommences), adjust your height so that you're lapping at the same rate as your opponent.

With an "eyes-off model" you can continually watch the other one and line up his/her streamer. As soon as the Circle Marshal says to commence combat, rip over in a wing-over for a cheap cut whilst your opponent begins to look for your model. Just don't cut off either too much or the whole streamer!

Next some salient facts. Any competitor who for whatever reason has a flyaway or does anything else that causes

injury or property damage will find that (s)he is wholly responsible and liable for any ensuing costs. Therefore a wrist tether which breaks or slips of in a line tangle causing a flyaway is not in anyone's best interest.

If a slip knot is employed, always make sure that it cannot loosen, is a fairly tight fit and no part can jag your opponent's lines! My tip is to attach the other end to the upper part of the control line handle, so if the handle is jerked loose the model will continue to (inside) loop until control is regained. The tip has saved me quite a number of bouts and more importantly, models!!!

The *trick* described here might be an old one but it sure is a goodie! How many times have you watched a bout where the attacker misses cut after cut because (s)he is following his/her opponent around the centre (piloting) circle and can't line up the handles?

The *pin* solves these problems by having the attacker position him/herself (in normal flight) to the left of their opponent whilst attacking model remains behind and slightly above with the lines crossing over those of the defender.

In this position the attacker controls the defender's body positioning and is easily able to line up both handles and models within the same field of vision. If the defender is flying too low and can't bunt, then there is no escape.

### **Combat Categories**

There are nearly half a dozen different 2.5cc Slow Combat categories in this country. South Australia also has a 1.5cc class. However Victoria and South Australia focus more on 1.5cc 1/2 A combat. Queensland however has flown a 6cc (.35 cu.in.) class for more than 20 years, well before any of the 2.5cc events elsewhere.

**F2D Modified** or as it's called in NSW, "2.5cc Australian Fast".

When engine and fuel restrictions were first introduced into F2D or "FAI Combat" in 1985/6, a considerable number of competitors ceased flying that event because amongst other things, with the exception of a specially ordered Nelson, you couldn't buy a F2D legal engine. (This situation persisted until around 1993!).

Those of us still wanting to fly F2D applied for a postponement of the rules until hardware was once again available and so that it wasn't won by the bloke with the best machine shop. In its wisdom the M.A.A.A. in 1988 created a separate National category which with the exception of later F2D Safety requirements, replicated pre-1985/6 F2D.

With the advent of Eastern Bloc produced engines, F2D Modified has gradually been replaced by current F2D Combat and its primary role of keeping 2.5cc Combat going has been achieved.

That's all folks - see you in the circle.

Brian Burke

AUS 2738

# CONTEST RESULTS



## Combined Speed at Knox 30/1/2000

Name	Pos	Class	Flight 1	Flight 2	Flight 3	Fastest	Fastest in KPH	%	Motor
R Hiern	1	1	15.34	-----	-----	15.34	234.68	96.8	OS CZ11PS
C.Agnev	2	.21	17.25	17.20	15.31	15.31	235.14	91.32	Nova Rossi .21
R Hiern	3	2	11.69	11.72	-----	11.69	247.81	85.54	STG21-29
H Bailey	4	Proto	33.30	33.36	-----	33.30	173.99	80.62	Nova Rossi .21
R Hiern	5	.049	12.37	-----	-----	12.37	116.84	77.68	AME .049
N Wake	6	2	12.92	13.23	-----	12.92	224.22	77.39	Picco .21
N Wake	7	4	12.73	12.93	12.47	12.47	232.31	76.58	OPS 40
P Van Muers	8	Proto	35.29	36.39	-----	35.29	164.18	76.08	Webra .20

## Midge Speed

Name	Pos	Class	Flight 1	Flight 2	Flight 3	Fastest	Fastest in KPH	%	Motor
J Hunting	1		10.43	-----	-----	10.43	138.54		PAW
K Hunting	2		10.86	10.92	-----	10.86	133.05		PAW

## KMAC JANUARY STUNT - WINDS AGAIN

Stunt fliers were hoping the new year would bring a change in weather fortunes at KMAC when the gang got together for its first competition day in January. Unfortunately, not so lucky as the winds were reasonably strong all day with additional gusts to keep everyone on their toes.

The top F2B duo of Peter White and Doug Grinham fought it out at the top end of the field followed by Mark Ellins and Derek Pickard before Leonid Iflyand and Terry Matthews. Unfortunately for Terry, his revitalised Webra 40 powered stunter was among those that hit the ground in the turbulent conditions. It's repairable and will be back.

Derek Pickard had fitted a pipe to his Retro and it certainly had the power to handle the wind as it screamed around in all three competition flights.

Ken Taylor turned up with his version of a very different US design for F2B. Pulled by a Moki 51 it turned well but a bang on the ground forced an early retirement for repairs.

New member Mark Hawkey had practiced well for his return to stunt in the Novice class. His OS25 powered Hot Control flew well and he intends to fly competition regularly.

### Results

1 P White	4160
2 D Grinham	3655
3 M Ellins	3502
4 D Pickard	3313
5 L Iflyand	3034

*Right :- Ken Taylor and his U.S. design F2B model*





This month, the editor has received plenty of copy relating to a development in Vintage A Team Race that took place at the Queensland State Championships in January.

For those of you that are not aware of these developments I will give a brief summary.

At the conclusion of the final of Vintage A team race a protest was lodged against the model of Mark McDermott relating to the legality of the internals of the engine used.

The rule covering this matter in the MAAA rule book is written in 4.14.3 d) and states:-

**Modifications are permitted to any engine but must be in the spirit of the event. The aim is to modify as would have been done in the 50's. Certainly no ABC or AAC setups would be permitted in any circumstances.**

The protest was upheld and as a result Mark was disqualified.

Mark has objected to the decision and the matter has now been referred to the MAAQ and a meeting by them to resolve the matter is to be held on Sat 19th Feb. The MAAA Control Line sub committee is also expected to give a ruling on the matter.

Opinions for and against the disqualification would fill a copy of this newsletter and leave little room for anything else. For this reason I have edited out all reference to the matter in this months articles and will await the outcome of the MAAA C/L sub committee ruling. All relative correspondence has been forwarded to the above mentioned sub committee.

Let us all hope this matter is resolved quickly and effectively and Vintage A continues to be the great class that it is.

see ideas which push a short term or narrow personal perspective.

1. Enshrined in the rule book a grading system which allows modellers to move towards a higher degree of proficiency through both a grading of events and gradings within an event. The system to prevent the more proficient modeller from going back to a lower grade just to clean up or show off.

2 To start the concept I would suggest FAI T/R as the top event to be flown at Nats and State Champs and any other venue as required. Those who compete in FAI are to be regarded as A grade modellers and are only eligible to compete in A grade events.

3. Vintage A to be divided into A and B grade. The A grade to be as per the existing rules with absolutely no changes (except calling it VINTAGE A), A grade competitors may not compete in B grade.

4. B grade to compete as a nominated time event with the nominated time being good enough to offer entry into A grade. I think a few explanations are necessary.

A.) I understand N.Z. runs Vintage A to a nominated heat time of 5 mins. If you are slower than 5 mins then your time is what you scored, but if you are faster then the difference is added to 5 mins. The basic aim is to be consistent and not necessarily fast and by adjusting the nominated time it is possible to have an event which is capable of being part of a progressive racing structure.

B.) The difficult question is what should be the nominated time? Somewhere about 4 mins would give performances suitable for stepping into A grade and those who do better than 4 mins to be regarded as having made the transition.

C.) The real curly one! Who should be regarded as A grade to begin with? Methinks all of us who compete in FAI and all those who have been to the forefront in A. As for mixed A and B grade teams I think they should be regarded as A grade. As for models it is a shame the B.O.M. rule is not in force any more.

D.) Only A grade events to be conducted at Nats and State Champs. B grade events to be club and inter club events. Certain events already in rule book for juniors and part of the established system at Nats still to be retained but perhaps looked at in the concept of an integrated structure

There are undoubtedly many objections to the above rule structure and the most obvious is that we do not have sufficient numbers to make it work at this point in time, but until we can have as an integral part of our rule book a structure which does not discourage newcomers by virtue of them being completely outclassed then I do not see our numbers ever increasing except by the odd one or two. To the best of my narrow aeromodelling experience we would be one of the few sporting bodies which does not have a grading or handicap system in place in the rule book.

Hope this starts some constructive contributions.

ANDY KERR,

## My Thoughts on Team Racing.

From Andy Kerr

Talking to quite a few people comes the observation that Vintage A is going the way of all performance events and will become a minority because a select few choose to put in enough effort to both raise the performance level and the overall standard and this will deter newcomers.

I would like to propose a few ideas, which hopefully create lots of constructive discussion toward the long-term encouragement of C/L racing events. I would not like to

# Class II Team Race

Class 2 T/R on grass was on the agenda at Knox on January 30th. The day was kind. About 25 degrees, just a small breeze and a fair bit of sunshine. Six teams arrived at the field with models. Robin Heirn had the combined speed event under way early and some of the Class 2's had a go at Proto Speed. Peter Van Meurs brought along his superbly constructed new racer. It is quite a stunning own design with a 3.5cc Webra in the nose. If Pete can find the time to sort this one out, then he can surely win a lot of races.

Peter Roberts was making his long awaited comeback to the team race circle after many years of talking about it...Good to see you Pete! We had been hearing a few stories as to how fast his Super Tigre model would circulate, but .18 lines appear to have taken the edge of his setup. Although the Tigre had good airspeed, it didn't threaten the two Rossi .21's who were down to low .15's for 7. Peter and pilot Robin Heirn didn't have the best of days with takeoffs becoming a problem as the heavier lines needed more tip weight. A run in ended their chances.

John Hallowell and Keith & Robyn Baddock established a PB and FTD with a 3.04.84 in the first heat. That's just a fraction behind Harry and Mark's record of 3.04.48, set at the last NSW State Champs. As that was flown on a hard surface, Keith and John just may claim their time as a grass record.... Now just who is going to be the first to break 3 minutes! Certainly Mark McDermott's Nelson .29 has enough grunt to be able to post a 2 minute something. Or will the Rossi's get there first?

Jim and Colin Ray were using an Australian B model with LA 25 power. Even with the extra drag of two wheels, this model recorded a classy 3.20. The Firebrand has covered the first 70 laps in 3.09 in a final late last year. Not bad for a plain bearing OS!

The brothers Hunting were a little off the pace with their Vintage B model, but soldiered on to a credible 4.20.53. These stalwarts are like pepper and salt...you'll always find them in there, having a go in the best Aussie tradition.

Harry Bailey is not known as 'The Fireman' for nothing. With Mark Ellins, he kept the troops entertained with a blaze big enough to get Robin Heirn scurrying for a bucket of water. The excess heat must have warmed up the Rossi nicely as a fast 3.09.96 resulted.

The final continued the rivalry between the two Rossi .21's with an LA 25 thrown in for good measure. As usual. Keith & Robyn had John's o/d orange racer first away, with at least a laps lead over Harry's 'Montezuma's Revenge'. There must have been a look of despair on Mark's face, as Keith had tuned his model to perfection, giving it superior

airspeed. It was a surprise how well the Firebrand was doing, with the Rossi's only just managing to pass the howling MRS LA 25. But the Rossi's lost ground when both faltered. Harry and Mark lost laps and had to make an extra stop and John and Keith had a shutoff problem and then a short landing when an unexpected upwind gust dumped the gliding model short of the pit. As the model won't roll as far, grass can be unforgiving this way. But it's sure better on the knees for pitmen and even pilots. That's right, isn't it Gra...? A tight finish was always on the cards, and no one was disappointed. Hallowell / Baddock made it home by less than a lap, just 1.68 seconds, from Bailey / Ellins with Ray / Ray a further 13 seconds in arrears. A very good and close race.

Results of Class 2 on grass, 30/1/00. Flown at Knox

1. Hallowell / Baddock	3.04.84	DNS	6.47.42
2. Bailey / Ellins	3.38.25	3.09.96	6.49.10
3. Ray / Ray	3.20.63	DNS	7.02.28
4. Hunting / Hunting	4.20.53	DNF	
5. Heirn / Roberts	DNF	DNF	
6. Van Meurs / Ray	DNS	DNS	

JOHN HALLOWELL VH 1984

## SUBSCRIPTION APPLICATION ARE YOU BORROWING?

If you have just finished reading somebody else's copy of Australian Control Line News why not get in now and order your own copy. Australia and New Zealand residents cost \$20A and other countries \$30A. For this annual amount you will receive eleven issues of this newsletter, and be up to date on Control Line both in Australia and elsewhere. Please make payments payable to "Control Line Advisory Committee"

You can order from:

G. WILSON  
PO BOX 298  
SEAFORD  
VICTORIA 3198 AUSTRALIA

NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
POSTCODE \_\_\_\_\_  
TELEPHONE \_\_\_\_\_

Below :-

Doug Grinham, Peter White, Derek Pickard



Below :- Mark Hawkey prepares to fly Novice Stunt at the January Knox competition



Many thanks for publishing John Hallowells' response to my original letter. Unfortunately as the letter itself wasn't published, reading the response is much like listening to one half of a phone conversation - things are not always what they seem.

For example; I specifically wrote that it was J H expressing concern for the apparent lack of competitive diesels. I am quite happy with my supply of engines - My MRS tuned Oliver/CS are far better than the team operating them, and I don't think that they are expensive. I don't like being misquoted!

Let me state clearly my stand on 2 issues:

a.) If local Melbourne flyers want to run local events for "Aussie" A, then fair enough - the class obviously has some merit if enough people want it. But, please don't confuse the event with Vintage A, or dilute entries for Vintage A.

b.) Two decades of involvement with motor sport as a competitor, scrutineer and rulemaker has taught me to spot "The thin edge of the wedge" a mile off. That is exactly what I see.

Best regards,

Dave Simons

**A.C.L.N. ADVERTISING**

For the newer readers, we point out that "private" (personal) ads are free to subscribers, and "commercial" ads are \$20 per quarter page, or \$5 for business card size. Commercial Advertisers can receive a free business card size ad for submitting original articles of interest to A.C.L.N. readers.

Copy or artwork for ads should be sent to the editor, cheques to the treasurer (G Wilson P.O. Box 298 Seaford, Vic. 3198) If you want to save a stamp, I can forward on any cheques sent with ads, but please make them payable to "Control Line Advisory Committee"

**SUPERCool RACING PROPELLERS**

★ RACE ★ PROVEN ★

★ Minimum industrial level computer designed propellers  
★ Advanced technology precision mouldings

F2ACW01	6 X 6.2	Bendix01 9 x 6
F2ACW02	6 X 6.3	Bendix02 8.5 x 6.5
F2ACW03	6 X 6.4	
F2C04	6.3 X 6.1	Supercool .....





Left:- A lovely looking Vintage A 'Humpty Go Kart'

Photo's from Charlie Stone

*Below:- Dave Gannon and Steve Walton with their Vintage A 'Humpty Go Kart'*



### Millennium Championships Report Held at Leichardt Field Ipswich from 1st - 4th January 2000.

No flying was carried out on 1st but a free BBQ for competitors was held to celebrate Y2K !!

Competition got under way right on time (9-30am) each day on the immaculate bowling green surfaces and the weather over the three flying days was perfect, with light breezes and temperatures in the mid 20's.

Competitors were able to sit in the shade of the "Ian Boetcher Motors" marquee between events.

Many many thanks to our sponsors, Ian Boetcher Motors, Hobby Headquarters & J Vogler & Son and to all the club members and competitors who helped out in any way and made this competition the success it was. Thanks guys and gals.

Hot and cold food and drinks were once again organised by our club secretary John Taylor who somehow managed to find time to compete as well.

Events over the three flying days could only be described as a series of "Demolition Derbys" That included Team racing as well as combat events. Many models were total write offs.

Vintage A and Vintage B results were included in last months edition of ACLN along with some pictures,

Special mention must be made of T/Birds junior Mathew Henley who beat a lot of senior competitors and took out the "Junior Champion of Champions Trophy."

The senior "Champion of Champions" trophy went right down to the last two events held and resulted in a tie between John Major of ALC and our own club president Mark McDermott.

All Competitors received a special commemorative New Millennium Certificate in addition to trophies won.

If you weren't present you missed out on a great weekend of flying and competition.

Finally - How's this for true club spirit!! The Norvell engine that was donated by Hobby Headquarters was won by Anthony Snell (1st placed junior CLASII Rat) and was promptly donated back to the club to be used as a prize for the winner of CLASII Rat 2000 competition.

#### Results

Senior "Champion of Champions" } Equal points

John Major  
Mark McDermott

Junior "Champion of Champions" Mathew Henley

#### F2B

1. Joe Parisi
2. Kery Ewart
3. Ian Garton

#### Vintage Stunt

1. Mathew Henley
2. Rodger Adams
3. Ian Garton

#### F2D Combat

1. Mark Dillon
2. John Major
3. Peter Wallace

#### Open Combat

1. Mark McDermott
2. John Major
3. Peter Wallace

#### Slow Combat

1. John Major
2. Brian Burke
- =3. Mark McDermott, Peter Wallace

Ipswich Open 2000

Control Line Scale Championships

Sunday March 12th

For more information contact John Taylor on  
(07)33927679



## Control Line Aeromodellers of Gippsland

From Peter White

Sunday February 6th saw thirteen flyers turn up at the Moe Race Course for a day of low key flying in high winds.

Yours truly arrived early for a change, to find Graham Keen already there and preparing to set up. Graham had brought along his delta with an Enya35 and a Wildcat/OS15, both of which were given airings throughout the day.

David Lay and son, Nathan, came in after lunch to join in the activities with a Spitfire/OS15 and an OS10 powered Cougar. Nathan put in two or three flights with the Cougar, appearing quite unfazed by the stiff easterly that was attempting to blow models out of the pits area.

Vic and Steve Mitchell arrived with their station wagon bristling with large models which they wisely decided not to risk in the conditions.

Another who chose to not fly was Paul Richardson who had his Windy with its Fox 35 sitting in the pits waiting for some better air to come along - a wait which proved long and fruitless.

Peter Roberts had his elderly No Name Class 2 Team Racer in the air a couple of times before finding a setting which the ETA 29 was happy with.

Graham Vibert ran out some lines connected them to his Top Flite Nobler, sniffed the breeze and noted that it blowing directly into the sun, all the while his enthusiasm waning noticeably. Consequently another Fox remained under wraps for the day.

Greg Beavor brought along his Hot Control/Enya 35 and Delta/OS FP40 while son, Andrew, had his Wildcat/OS FP15 in the air on a number of occasions. Andrew's new 'stunt trainer' with its OS FP 25 remained grounded - probably a wise move as it has a wing warp that could have made life in the circle much more interesting had an eight or a loop been placed wrongly in relation to the wind.

The Little AME 049 powered Mercury Midge of Robbie Hiern encountered some difficulties in departing terra firma or grassus ruffus but once aloft it moved quite quickly although for various reasons it doesn't evoke the feelings of awe (and wishing that you were on the other side of a sturdy wire mesh fence) that an open speed model does. Robbie also had an open speed model but I don't recall seeing this one go.

Geoff Ingram posted three good flights with his Enya 35 powered Windy with some hairy moments in the vertical and overhead eights. Geoff didn't seem overly worried but some of the onlookers became rather excited - they could probably smell blood.

Yours truly made a couple of flights with the Fox29/All American battling the breeze fairly well.

All in all, the day went off quite well with no mishaps despite the quite strong constant wind.

The next meeting will be on the grounds of Hobson's Park Hospital, on Sunday 5th March followed by the Maffra gathering on April 2nd, again the first Sunday of the month.

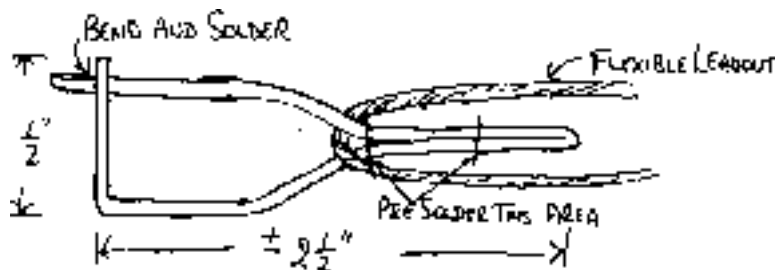
I can supply locality maps to anyone who doesn't know

where the various fields are. Any other details are available from Paul Richardson on 51 47 2374 or mobile 0402 066 753 or myself on 56235120.

Those of us who use flexible leadouts probably have a favourite method of attaching them to the bellcrank. For what its worth I've used the following set up with some minor refinement since the late 70s.

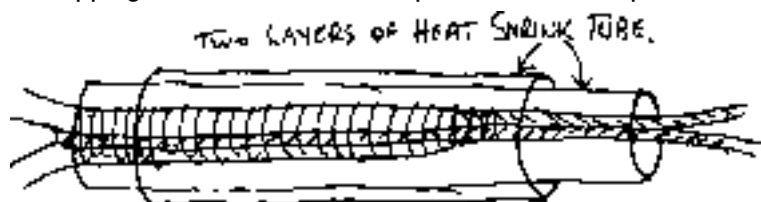
The two leadout holes in the bellcrank are drilled to accept 1/8th inch brass tube - a 1/4inch length is soldered into each hole. Cut two 1/4inch lengths of 3/32inch tube that will fit neatly into the 1/8 inch tube.

Bend a length of 1/16th wire as follows



I use a double run of heavy laystrate which is passed through the yoke and bound securely with fine wire eg. fuse wire, all the way along the doubled 1/16 inch wire. Heat the pre-soldered area with a soldering iron and flow a little solder into the wire wrapping.

The remaining section that was not pre-soldered is smeared with Epoxy Resin as is the first inch or so of Laystrate after it leaves the doubled 1/16inch wire. Before the Epoxy Resin cures (no hurry if you use normal E.R.) Slip a 2-21/2inch length of heat shrink tube over the leadouts and up on to the wrapping and shrink it. Repeat this operation with a shorter piece, 1/2inch - 2inch long. Stepping the heatshrink is to help eliminate stress points.



Keep some tension on the leadouts while heating the shrink tube to pull everything into line as it would be with flying tension.

Back at the bellcrank, fit the right angle bend bearing up through the 3/32inch brass tube; carefully bend the overhanging top part of the yoke +/- 90 degrees around the wire bearing. Wire the two together and snip off excess ends.

Before the final assembly remember to coat all the bearing surfaces with grease, Teflon Lube or similar.

While this method is not too hi-tech and possibly has faults that I haven't identified as yet, it does work for me and I'm happy to put my trust in it with any model I'm likely to build.

If any readers have alternate methods that they would like to share, I'm sure there would be others interested in trying them out.



**NATS 2000**

**Model Aeronautical Association of Australia  
53rd Australian Model Aircraft National Championships**

*"Shoalhaven City - Nats 2000"*

**NOWRA, NSW.**

**26 April to 4 May, 2000**

**Bulletin No. 3 - February, 2000.**

#### Changes and Alterations to Events

Following are changes to the advertised list of events and other event details for your information:

#### Control Line:

- \* Junior Fun Rat Race is replaced by Junior Rat Race. This event will be run to MAAA Inc Rules as per the MAAA Rules Book
- Junior Combat will be run to MAAA Inc Rules as per the MAAA Rules Book.
- Vintage "B" Class Team Race rules are published with this Bulletin.
- Vintage "A" Class Team Race rules have been published previously.
- Gordon Burford Vintage "A" Team Race rules have been amended to, Vintage A Teamrace rules but a Gordon Burford diesel motor must be used. No schnurle-ported engines allowed. No glo engines converted to diesel allowed.
- Classic Aerobatics rules are published with this Bulletin.
- Slow Combat rules are published with this Bulletin.
- Four Control Line Aerobatic events incorrectly shown as Teams Events on some entry forms.

#### Entry Forms:

- \* Please note that payment of the \$30-00 Registration Fee is mandatory and is in addition to event entry fees.
- \* When ordering Nats Polo Shirts your size must be included on the entry form.
- \* Raffle tickets will be sent to you if payment is made on entry form. Additional books of tickets are available.
- \* In Teams events each member of a team is required to pay the event entry fee and must be a Registered Nats Competitor.
- \* Entries close 3rd March, 2000. A surcharge of \$50-00 will apply to late entries.
- \* Accommodation information can be obtained from Shoalhaven Information Centre 02 4421 0778 - ask for Mrs. Beverly.
- \* Nationals Committee:- Chairman Mr. Joe McGuffin 02 9825 4695. Secretary Mr. Dave Brown 02 6351 2513.

## Vintage "B" Team Racing Rules.

### 4.3.9.3 Model Details.

The following section gives typical (but not exhaustive) guidelines for what may or may not be allowed.

(a) Entrants are encouraged to adhere as closely as possible to the original design to capture the flavour and authenticity of the period. A +/- 5% dimensional building tolerance is allowed. Any modifications which, in the opinion of the Contest Director, significantly change the appearance or performance of the model as originally designed will not be allowed.

(b) Structures may be strengthened for racing to current rules using materials and methods consistent with the period, i.e. soft balsa in place of sheeting or balsa, silk or nylon in place of tissue on built up flying surfaces or stringered fuselages etc. In addition, open structures such as built up flying surfaces may be sheathed with thin balsa before covering.

(c) Models with split fuselage construction (e.g. Footprint) may be made in one piece, with a contemporary hinged cow if the engine was originally attached to the top half of the fuselage or a drop in layout if it was originally "see to the bottom half". Models designed with a built-in engine installation may be modified to a drop in layout.

(d) Leadouts position and spacing must be as per plan (no grouping) and wire connections must be external to the model unless shown as internal on the original plan.

(e) Engine access must be as per plan with no metal pans or drop in layouts except as noted in (c) above. Radial mounts can be replaced by engine booms. The cow/engine position can be adjusted to suit different engine dimensions and weights.

(f) Wheels must not be behind a vertical line through the plan position, with track likewise conforming to the plan dimensions. A spreader bar may be fitted if desired.

(g) Elevators must fit as per plan (no single elevator instead of a double).

(h) The use of carbon and kevlar is not allowed.

(i) Glowplug activation systems shall be limited to commercial clips, two pin plugs or jackplugs. Any other system must be shown on the plan or have acceptable proof of use in the period.

(j) Models may be flown with the spinners removed but if so, a domed safety nut must be fitted.

(k) A shut-off can be fitted but only for emergency use and not for the purpose of a normal pilot stop.

(l) Entrants are encouraged to find additional models with acceptable proof of eligibility.

### 4.3.9.4 Eligibility of Engines.

(a) The maximum engine size is 5cc or 20 cc inches.

(b) A Vintage engine is one whose design and mark number was advertised for sale prior to 1<sup>st</sup> January, 1959, although the engine need not necessarily have been manufactured by that date.

(c) The engine used in a model in the Vintage B Team Racing shall either conform to the above or, if of later design and manufacture, be a plan bearing, non-schuerer ported engine, commercially advertised at some time.

(d) The use of ETA 6Cs will be permitted as they are direct lineal descendants of earlier scarce engines and offer no marked increase in performance.

(e) Any engine modifications, replacement parts or hybrid engines must use materials and technology readily in use for model aircraft engines used in Class B team racing prior to 1<sup>st</sup> January 1958 - e.g. a loop scavenger engine will have a baffle piston. Although available at the time, peripheral jet carburettors will be allowed. Note - A hybrid engine must have the crankcase of an engine as defined in (a), (b), (c) or (d) above.

### 4.3.9.5 Propellers

Propellers shall not be of the glass carbon, kevlar or other resin bonded types.

### 4.3.9.6 Tanks

(a) Tank capacity, including fuel lines shall be 30cm<sup>3</sup> for Class B.

(b) There shall be no use of such modern features as multi-function valves and pressure refuelling.

Refuelling shall be by squash bottle only.

### 4.3.9.7 Lines.

(a) The control lines shall be measured from the centre of the handle grip to the centre of the model. They shall conform to current safety regulations for Team Racing and each ready to fly system of handle/lines/insights shall be subject to a pull test of twenty (20) times the model weight for Class B.

(b) For Class B, the line length shall be 17.06 metres (56'0") with a minimum line diameter for solid lines of 0.345 mm (0.0136") and for multi-strand lines of 0.38 mm (0.015").

### 4.3.9.8 Distances

Heats	Class B - 75 laps
Finals	Class B - 150 laps

### 4.3.9.9 The Circle.

(a) The radius of the pilots' circle shall be three (3) metres for Class B. The radius of the flight circle shall be 20.56 metres (67'6") for Class B.

(b) The circle shall be divided into six (6) equal segments for the locations of the starting positions, choice of which shall be by means of a draw.

### 4.3.9.10 Race Conduct.

The conduct of the race shall be in accordance with the rules laid down for the conduct of "A. Class" Team Racing events in the current edition of the MAAA Inc. Contest Rules Book. In the interests of safety, the Contest Director may, at his discretion, group models/teams according to their performance/competence.

### 4.3.9.11 Scrutineering.

Scrutineering will be carried out at the discretion of the Contest Director and may include model/engine, tank capacity and lines. The onus of proof lies with the entrant for any model/engine feature not listed and the entrant must have acceptable provenance on the day of the contest.

### 4.3.9.12 Proof of Authenticity.

(a) A Vintage B Team Racing Model must be built to a constructionally detailed and dimensioned plan or three-view published or cited prior to 1<sup>st</sup> January, 1958. January 1958 magazines are accepted as published in 1957. The model must comply with the accepted team racing rules at the time of publication. Exceptions to this rule may be permitted as follows.

(b) Where only photographic evidence of a design was published before 1<sup>st</sup> January, 1958, but the original designer's can confirm accurate details of the model by signing the plan.

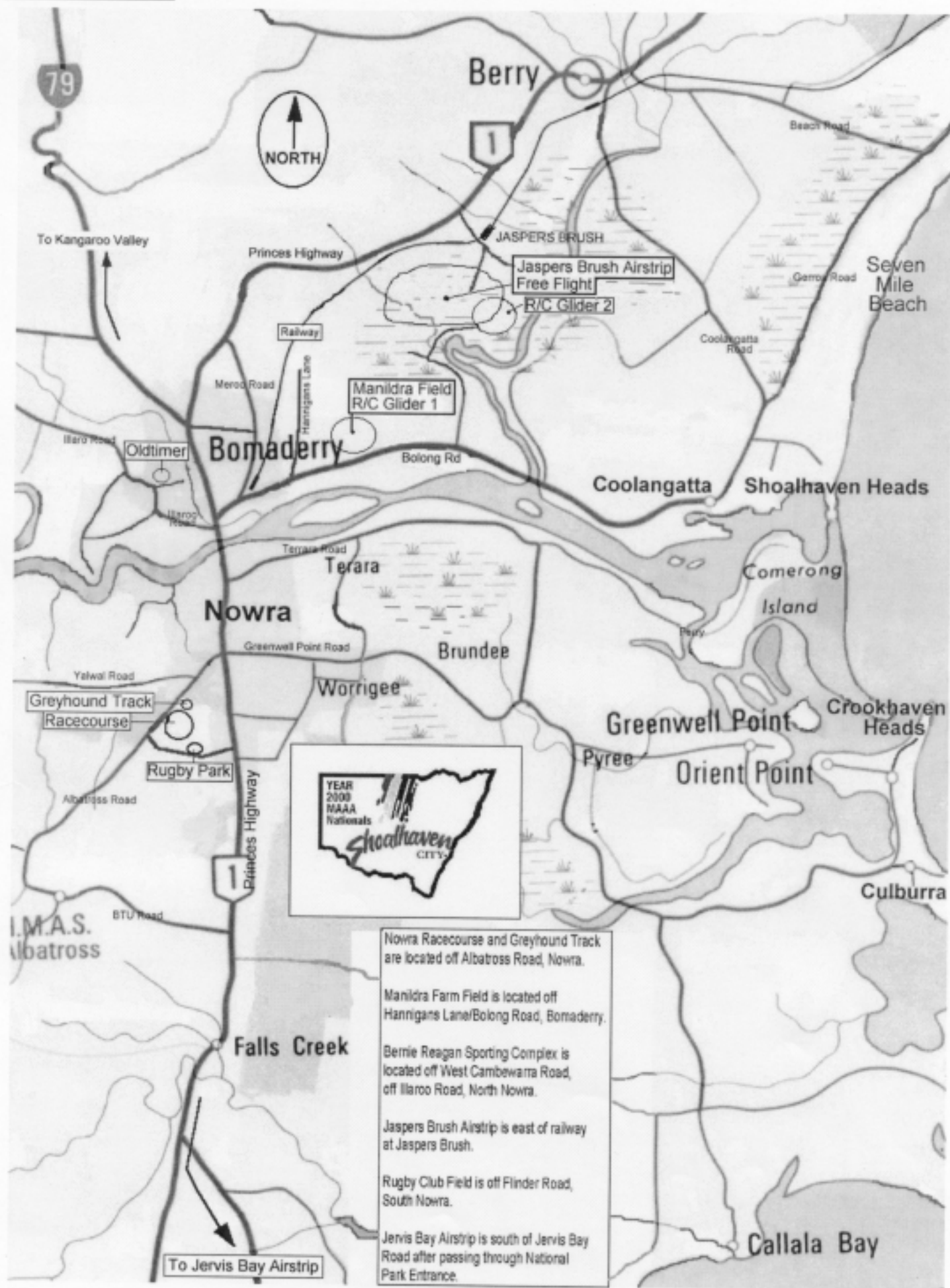
### SUPPLEMENTARY REGULATION:

The Technical Committee has the right to protect the class for the majority of its competitors and for the good of the class as they see fit.

1. The competitor must use an engine modified in Australia and be able to prove it to the satisfaction of the Technical Committee if required. Failure to do so will draw a DQ. The exception to this rule is engines modified before the cut-off date of 1<sup>st</sup> January, 1959.



Location of Flying Fields:



## Rules for Control Line Slow Combat:

1. MOTORS: Not to exceed 0.15 cu.in. [2.5cc] and must be plain bearing. [No Taipan etc. ballrace accepted]. No enginemodifications.
2. PROPELLERS: Diameter 7 or 8 inches. Pitch 4-6. Minor adjustments for balancing only. ie.Sports props.
3. FUEL: Glow fuel standard FAI mix. Diesel to have maximum 2%IPN or similar.
4. TANK: Standard wedge or square section tank to be used. No pressure bladders.
5. Maximum of two models per flying day and one model per bout.
6. All models must ROG at all Times. Failure to do this will incur a penalty of 100 points for each occasion
7. Any Competitor will be disqualified from the individual flying day if in the opinion of the CD they breach the intention of the rules or contest.
8. All the pre 1988 FAI combat rules will apply unless contradicted by the rules above.
9. Model must resemble an aeroplane.
10. The CD may direct a model to be slowed down.

## Rules for Control Line Classic Aerobatics:

- The model must be a pre 1965 design. Proof required (plan, magazine article)
- Model must have an effective Muffler.
- Flight time 7 minutes maximum.
- Departure (within 1 min.), Take Off, Horizontal flight, Double wing over (reverse), Consecutive inside round loops (5), Inverted flight (2 laps), Consecutive outside round loops (5), Consecutive horizontal round eights (3, FAI), Consecutive Vertical eights (3, FAI), Consecutive overhead eights (3 FAI), Four Leaf Clover, Landing.

## Program of Events:

The program of events as previously circulated with the entry form, published in Airborne Magazine and the Radio Control Model News, is still current as this date.

### Control Line Events

- 1 F2A Speed
2. Combined Speed
3. F2B Expert Aerobatics
4. F2B Advanced Aerobatics
5. Junior Aerobatics
6. Vintage Aerobatics
7. Classic Aerobatics
- 8 F2C Team Race (t)
9. Mini Goodyear (t)
10. Goodyear (t)
11. Bendix (t)
12. Junior Rat Race (t)
13. 2.5cc Rat Race (t)
14. 1/2A Team Race (t)
15. B Class Team Race (t)
16. Vintage A Class Team Race (t)
17. G B Vintage A Team Race (t)
18. Vintage B Class Team Race (t)
19. F2D Combat
20. Open Combat
21. 2.5cc Slow Combat
22. Junior Combat
23. F4B Scale
24. Stand-Off Scale

# 2000 HUNTER VALLEY AEROMODELLING CHAMPIONSHIPS

ON THE 4TH & 5TH MARCH 2000 AT  
MITCHELL HILL FIELD MUSWELLBROOK

CATERING FOR R/C, C/L AND F/F  
**FLYING PROGRAMME**  
**SATURDAY**

RADIO CONTROL	CONTROL LINE	FREE FLIGHT
9AM: SAILPLANE OPEN AND 2 METRE	9AM: GOODYEAR VINTAGE A TEAM RACE  1PM: SLOW COMBAT 1PM: CLASSIC STUNT	8PM NIGHT SCRAMBLE

## SUNDAY

RADIO CONTROL	CONTROL LINE	FREE FLIGHT
9AM: TENACC  11AM: DELTAION	9AM: AEROBATICS 9AM: JUNIOR SINGLE RAT 9AM: FAI F2D COMBAT (AUSTRALIAN FAST ALLOWED)  9AM TO 3PM COMBINED SPEED EXCLUDING FAI AND MIDGE	7AM TO 8:30AM OPEN 8:30AM- 9:30AM HALF HOUR SCRAMBLE  7AM TO 8:30AM F/F NOON: LITTLE KIDS FLY

NOTE: TO ENTER THE ORGANISATION MEMBERSHIP IS REQUIRED FOR ALL EVENTS.

CLOSING DATE: 25TH FEBRUARY 2000.

PAID ENTRY REQUIRED

R/C FREQUENCIES: 29, 36 & 40 MHz Certified to 27 MHz

CAMPING AT THE FIELD IS PERMITTED.

MOTEL AND CARAVAN ACCOMMODATION AVAILABLE IN MURRAYBROOK (10KMS FROM FIELD)  
ACCOMMODATION LISTING ON REAR PAGE OF PROGRAMME.

CATERING OPEN ALL WEEKEND - HOT AND COLD MEALS AND DRINKS.

\*\*\*\*\* BREAKFAST AVAILABLE SATURDAY AND SUNDAY MORNING \*\*\*\*\*

SATURDAY NIGHT BAR-B-Q WILL BE AVAILABLE.

PHONE: 02 49 345 443.

**BRING ALONG ALL YOUR BITS AND PIECES FOR THE SWAP MEET BEING HELD ALL WEEKEND.**

FAI SPORTING CODES AND AMENDMENTS AND AUSTRALIAN RULES - C/L, F/F & R/C NOW AVAILABLE IN BINDER FOR \$31.00. PLUS POSTAGE.

AUSTRALIAN RULES ONLY AVAILABLE SEPERATLY WHICH COVERS ALL AUSTRALIAN EVENTS FOR \$16.00 PLUS POSTAGE.

SEE YOUR STATE REP FOR A COPY AS POSTAGE WILL ADD APPROX \$8.00 PER COPY.

ALL RULES ARE UP TO DATE JUNE 1995.

VICTORIAN STATE REPRESENTATIVE IS GRAEME WILSON

Phone (03) 9786-8153

Send to **CLAC**  
P O Box 298  
SEAFORD 3198

# WANTED

New in Box Enya 35 stunt motor (prefer 35 II model 6001) Pay cash or swap replica Taifun "Orkan" un-run in box.

Phone Bob Allan on (02) 6342 4413

→ → → → → → → → → →

ETA Elite in good condition. Will swap or buy.

Frog 180 Diesel in VGC Will swap or buy.

John Duggan. 22 Bridelia Street. Algester 4115. QLD.

Tel (07) 32736932

→ → → → → → → → → →

Control line handle made from 9mm wide section of 103 x 52mm RHS aluminium 9mm thick and has a round section handle screwed to one side. Brand name could be "Saginaw"?

Brian Burke,

2-24 Appalooso Court, Munruben, Qld, 4125

Tel (07) 3200 1308

→ → → → → → → → → →

Aeroflyte "Rambler" B Team Racer Kit complete

Keil Kraft "Talon" flying wing kit complete

Frog 249 BB (Diesel)

AM 35 Red Head (Diesel)

Bits for an Ucktam 2.5 KP

(Rod, wrist pin, circlips, piston/cylinder

Jim Trevaskis. 5 Mariala Court, Wattle Grove, 2173, NSW

Phone 0417928974

→ → → → → → → → → →

I'm looking for an ST51 to do an experiment with. It doesn't matter if its new or used as long as its in good order.

Brian Gardner

Email:- Gardner.Brian.BD@bhp.com.au

→ → → → → → → → → →

Tiapan 1.5cc TBR Diesel engine or crankcase. Will buy or trade for some of my things in the (For Sale) list.

Phone James Gibbins 03 53 848201

→ → → → → → → → → →

I'm after a copy of the plan (or a kit if I have to) for a Keil Kraft "Radian" .049 22" span flapped stunt plane.

Mike Hawkey

Ph: (03) 9817-7653

Email: hawkeys@eisa.net.au

# For Sale

Sig Magnum stunter 40/60 kit \$150

Mazniak 1/2A 5.85cc tank valve \$180

Paul Stein 03 9546 5006

→ → → → → → → → → →

Stunter for sale: Time Machine 57inch by Tom Dixon (Scaled down Patternmaster) Professionaly built. Excellent. \$180

Suit 50 or 60.

Also : Tigre 60 engine to suit \$200

Derek Pickard (03) 9889 1149 AH

→ → → → → → → → → →

Two engines:- Glo-Chief 29 \$90

O.S. Max3 29 \$85

Phone Alan Harrison on (03) 9337 4193

→ → → → → → → → → →

1/2A Combat flyers can obtain Taipan 7x4" & 7x6" nylon props from "Model Flight" \$29.95 for 10

Telephone 08 8293 3674

→ → → → → → → → → →

1 x MVVS 1. 5cc Diesel. Good cond. \$35

2 x Enya 1. 5cc glow \$30 each

1 x OS 10 FP Diesel conversion \$20

1 x PAW 1. 5cc. (Worn out.) \$10

1 x PAW 1. 5cc. Plain bairing

Combat tuned. (New) \$100

2 x Cox Baby Bee .049. Good cond. \$30 each

1 x Cipolla 1. 5cc glow \$30

2 x Half A Russians with tanks and controls to suit 1. 5cc. Excellent cond \$15 each

2 x Zipper 1/2A Combat models with tanks and controls. Excellent cond. \$10

Phone James Gibbins 03 53 848201

→ → → → → → → → → →

Pro-built Nobler. Silk covered, Eather tank, etc. Fitted with excellent Merco 35. Flies and looks great. Ready to fly. \$200

Phone Derek Pickard 03 9889 1149

→ → → → → → → → → →

Brand new O.S. 35FP from "Stuka Stunt Works" U.S.A. Turns a 12 x 6 prop, C/W custom silencer and full instructions still in box. Cost \$230 Aust

Sell for \$180

Phone Ron 03 9579 1143

→ → → → → → → → → →

AUSTRALIAN CONTROL LINE NEWS  
Print Post Publication No. PP 343695/00024

If undeliverable return to:-  
**G. WILSON**  
**P. O. BOX 298**  
**SEAFORD VIC 3198**

**SURFACE  
MAIL**

**POSTAGE  
PAID  
SEAFORD**

# MODEL RACING SERVICES



## \*\*\* Services \*\*\*

Motor Modifying and Blueprinting for all competition classes, ie. Pylon, Control Line, R/C, FF, Aircraft, Boats, & Cars, Rebush Conrods - Replace Conrod - Replace Piston - Diesel Conversions - Motor Repairs - General Machining - McAnelly Pans.

## \*\*\* Kits \*\*\*

"Arrow" - 2cc - 2.5cc speed kit includes pan, pre cut wood, hardware, plans etc. **\$85.00**

"Ol Blue" - 2cc Mini Goodyear - pre cut wood, hardware, wheel, shutoff, plans etc. **\$69.00**

## COMPONENTS FOR THE COMPETITION & SPORTS MODELLER

Goodyear Shut Offs	Venturis
Head Inserts ¼ x 32 & Nelson	Check Valves
Wheels 27, 40, 50 & 60mm	Stunt Mufflers
Racing Undercarriage Leg & Box Sets	Line Reels
Prop Nuts, Prop Drivers & Extensions	Piston Rings
Elevator & Flap Horns	Pan Hold Downs
"Adjustable" Team Race & Stunt Handles	Alloy Wings
Tank Valves - Pressure & Suction	Exhaust Extensions
Single Blade Counter Weights	Mono-Line Torque Units
Mono-Line Handle Units	Single Strand Lines
Paxalon & Steel Bellcranks	Bobbin Bellcranks
Magnetic Prop Balancers	

**" Plus Many More Items "**

For Mail Order or for complete price list to :-  
**Robin Hiern Model Racing Services**  
**P O BOX 976 CRANBOURNE 3977 VIC**  
**Phone 03 59 96 0339 Fax 03 59 96 0307**

Hrs. Monday to Friday 8.30 a.m. - 7.00 p.m. Visitors by appointment